

TRANSMITTAL FORM (to be used for all correspondence after initial filing)		Application Number	10/687,371
		Filing Date	October 15, 2003
		First Named Inventor	Kamps, Bill
		Art Unit	not yet known
		Examiner Name	not yet known
Total Number of Pages in This Submission		Attorney Docket Number	040079-000210US

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Postcard Copies of thirty-four (34) cited references
Remarks		The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

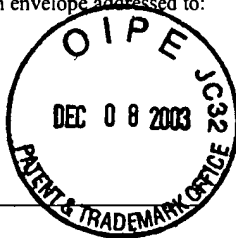
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual	Townsend and Townsend and Crew LLP Chad S. Hilyard Reg. No. 40,647
Signature	
Date	December 4, 2003

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Typed or printed name	Nicole M. Wartell		
Signature		Date	December 4, 2003

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

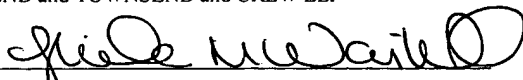
PATENT
Attorney Docket No.: 040079-000210US

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450



On December 4, 2003

TOWNSEND and TOWNSEND and CREW LLP

By: 
Nicole M. Wartell

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Bill Kamps

Application No.: 10/687,371

Filed: October 15, 2003

For: SYSTEMS AND METHODS FOR
GEOPHYSICAL IMAGING USING
AMORPHOUS COMPUTATIONAL
PROCESSING

Examiner: not yet known

Art Unit: not yet known

INFORMATION DISCLOSURE
STATEMENT UNDER 37 CFR §1.97 and
§1.98

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. U.S. patents are not enclosed in accordance with the Patent Office waiver issued August 5, 2003 in the Official Gazette, which states as follows:

The Office hereby waives the requirement under 37 CFR 1.98

(a)(2)(i) for submitting a copy of each cited U.S. patent and each U.S. patent application publication for all U.S. national patent applications filed after June 30, 2003 and for all international applications that have entered the national stage under 35 USC 371

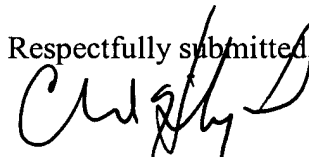
after June 30, 2003. See 37 CFR 1.491(b).

In accordance with 37 CFR 1.98(a)(2), copies of the non-patent literature references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Chad S. Hilyard
Reg. No. 40,647

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 303-571-4000
Fax: 303-571-4321
CSH:nmb
60063572 v1



Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	10/687,371	
			Filing Date	10/15/2003	
			First Named Inventor	Kamps, Bill	
			Art Unit	not yet known	
			Examiner Name	not yet known	
Sheet	1	of	5	Attorney Docket Number	040079-000210US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
	A1	US-4,286,319	08-25-1981	Membrino et al.	
	A2	US-4,351,025	09-21-1982	Hall, Jr.	
	A3	US-4,414,624	11-08-1983	Summer, Jr. et al.	
	A4	US-4,816,993	03-28-1989	Takahashi et al.	
	A5	US-5,025,369	06-18-1991	Schwartz	
	A6	US-5,198,979	03-30-1993	Moorhead et al.	
	A7	US-5,307,496	04-26-1994	Ichinose et al.	
	A8	US-5,361,373	11-01-1994	Gilson	
	A9	US-5,404,296	04-04-1995	Moorhead	
	A10	US-5,428,783	06-27-1995	Lake	
	A11	US-5,430,734	07-04-1995	Gilson	
	A12	US-5,537,319	07-16-1996	Schoen	
	A13	US-5,550,787	08-27-1996	Railan et al.	
	A14	US-5,600,845	02-04-1997	Gilson	
	A15	US-5,657,223	08-12-1997	Juszczak et al.	
	A16	US-5,734,829	03-31-1998	Robinson	
	A17	US-5,944,779	08-31-1999	Blum	
	A18	US-5,991,695	11-23-1999	Wang et al.	
	A19	US-5,995,904	11-30-1999	Willen et al.	
	A20	US-6,049,759	04-11-2000	Etgen	
	A21	US-6,061,730	05-09-2000	Billings	
	A22	US-6,112,225	08-29-2000	Kraft et al.	
	A23	US-6,115,764	09-05-2000	Chisholm et al.	
	A24	US-6,134,599	10-17-2000	Chiu et al.	
	A25	US-6,304,916 B1	10-16-2001	Iwatsuki et al.	
	A26	US-6,330,583 B1	12-11-2001	Reiffin	
	A27	US-6,446,007 B1	09-03-2002	Finn et al.	
	A28	US-6,496,969 B2	12-17-2002	Gilson	
	A29	US-2003/0023576 A1	01-30-2003	Gilson	
	A30	US 2003/0028590 A1	02-06-2003	Gonzalez et al.	
	A31	US-6,535,940 B1	03-18-2003	Liu et al.	
	A32	US-2003/0115096 A1	06-19-2003	Gilson	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
	B1							<input type="checkbox"/>
	B2							<input type="checkbox"/>

Examiner Signature	Date Considered
-----------------------	--------------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.
60063572 v1



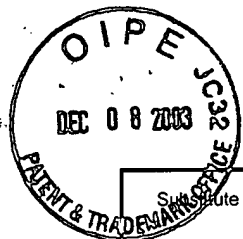
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	10/687,371		
		Filing Date	10/15/2003		
		First Named Inventor	Kamps, Bill		
		Art Unit	not yet known		
		Examiner Name	not yet known		
Sheet	2	of	5	Attorney Docket Number	040079-000210US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C1	Announcement entitled: "PGS Debuts Seismic Processing System for UNIX/LINUX", (Cube Manager 2.50 Product Announcement), <i>Communications of the ACM</i> , Oct. 2000, Vol. 43, No. 10, p. 55.	
	C2	Article entitled "NASA Langley Installs Next Generation Star Bridge Hypercomputer", Wasatch Digital iQ, March 26, 2003, 1 page	
	C3	ASHIDA, YUZURU Abstract of "Data Processing of Reflection Seismic Data by Use of Neural Network", <i>Journal of Applied Geophysics</i> , Oct. 1996, Vol. 35, No. 2-3, pp. 89-98.	
	C4	BARRAEZ, D. et al., Abstract of "Modular Neural Networks for Seismic Tomography", <i>Proceedings 16th International Conference on Pattern Recognition, IEEE Comput. Soc.</i> , Part Vol. 3, 2002, pp. 407-10.	
	C5	BOHLEN, T., Abstract of "Parallel 3D Viscoelastic Finite Difference Seismic Modeling.", <i>Computers and Geosciences</i> , October 2002, Vol. 28, No. 8, pp.887-99., Publisher: Elsevier, UK.	
	C6	EWING, R.E. et al, Abstract of "Distributed Computation of Wave Propagation Models Using PVM.", <i>IEEE Parallel & Distributed Technology</i> , Vol. 2, No. 1, Spring 1994, pp.26-31, USA.	
	C7	FITHIAN, W. et al. "Iterative Matrix Equation Solver for a Reconfigurable FPGA-Based Hypercomputer®" Star Bridge Systems, Inc., September 5, 2002, 14 pages.	
	C8	GAZDAG, JENO and WANG, HSUAN-HENG; Abstract of "Concurrent Computing by Sequential Staging of Tasks", <i>IBM Systems Journal</i> , December 1989, Vol. 28, No. 4, Page 646 (15).	
	C9	GILSON, KENT et al. "New Methodology For FPGA Based Designs Offers Significant Benefits over HDL Based Methods", January 2002, 5 pages.	
	C10	HOOPERBRUGGE, P. et al., Abstract of "Experiences With Networked Parallel Computing", <i>Concurrency Practice & Experience</i> , Vol. 7, No. 1, Feb. 1995 pp. 1-16. UK.	
	C11	HUNTER, P "Oiling the Wheels", <i>Computer Weekly</i> , June 7, 2001, p. 31 (Full Text: 2001 Reed Elsevier Business Publishing, Ltd., UK,) (6 pages).	
	C12	JIAN, LU et al. "A Hierarchical Framework for Parallel Seismic Applications", <i>Association for Computing Machinery, Inc., Communications of the ACM</i> , Oct. 2000, Vol. 43, (6 pages)	
	C13	KOFAKIS, P. & LOUIS, J., "Distributed Parallel Implementation of Seismic Algorithms.", <i>Mathematical Methods in Geophysical Imaging III, Proceedings of Spie- The International Society for Optical Engineering</i> , Vol. 2571, 1995, pp.229-38, USA.	
	C14	KOLBASUK MCGEE, MARIANNE, "Mobil Leaves Cray for Parallel Universe.", <i>InformationWeek</i> , October 11, 1993, No. 446, Page 62.	
	C15	LYONS, DANIEL, "Super-Cheap Supercomputing?" Forbes.com website, March 25, 2003, 4 pages.	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.



Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	10/687,371	
			Filing Date	10/15/2003	
			First Named Inventor	Kamps, Bill	
			Art Unit	not yet known	
			Examiner Name	not yet known	
Sheet	3	of	5	Attorney Docket Number	040079-000210US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
	C16	NICCANNA, C. & BEAN, CJ, Abstract of "Larger Grids and Shorter Wall-clock Times on a Parallel Virtual Machine (PVM) - an Example Using a Finite Difference Wave Simulation Algorithm", <i>GeoComputation 96 - 1st International Conference on GeoComputation</i> , 1996, Univ. Leeds, Part Vol. 2, pp. 661-662.		
	C17	NICCANNA, C. & BEAN, CJ, Abstract of "The Use of a Parallel Virtual Machine (PVM) for Finite-Difference Wave Simulations.", <i>Computers & Geosciences</i> , Vol. 23, No. 7, August 1997, pp.771-83, Publisher: Elsevier, UK.		
	C18	SEN, V., SEN, M.K., & STOFFA, P.L., "PVM Based 3-D Kirchhoff Depth Migration Using Dynamically Computed Travel-Times: An Application in Seismic Data Processing.", <i>Parallel Computing</i> , March 1999, Vol. 25, No. 3, pp.231-48, Publisher: Elsevier, Netherlands.		
	C19	SHIMSHONI, Y. et al., "Classification of Seismic Signals by Integrating Ensembles of Neural Networks", <i>IEEE Transactions on Signal Processing</i> , Vol. 46, No. 5, May 1998, pp. 1194-201. (Abstract) (1 page).		
	C20	SINGLETERRY, R. et al. "Field-Programmable Gate Array Computer in Structural Analysis: An Initial Exploration", American Institute of Aeronautics and Astronautics, Paper No. AIAA-2002-1761, 11 pages		
	C21	STAMMLER, K. Abstract of "Seismic Handler-programmable Multichannel Data Handler for Interactive and Automatic Processing of Seismological Analyses", <i>Computers & Geosciences</i> , Vol. 19, No. 2, Feb. 1993, pp. 135-40. UK.		
	C22	Star Bridge Systems website "Company Overview" About Us page at: http://www.starbridgesystems.com , 2 pages.		
	C23	Star Bridge Systems website "Download Latest Library" Support page at: http://www.starbridgesystems.com , 3 pages.		
	C24	Star Bridge Systems website "Hardware Description" Products page at: http://www.starbridgesystems.com , 1 page.		
	C25	Star Bridge Systems website "Hardware Description" Technology page at: http://www.starbridgesystems.com , 6 pages.		
	C26	Star Bridge Systems website "Management" About Us page at: http://www.starbridgesystems.com , 4 pages.		
	C27	Star Bridge Systems website "Overview" Products page at: http://www.starbridgesystems.com , 1 page.		
	C28	Star Bridge Systems website "Papers" Technology page at: http://www.starbridgesystems.com , 2 pages.		
	C29	Star Bridge Systems website "Software Description" Products page at: http://www.starbridgesystems.com , 3 pages.		

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.



INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/687,371
				Filing Date	10/15/2003
				First Named Inventor	Kamps, Bill
				Art Unit	not yet known
				Examiner Name	not yet known
Sheet	4	of	5	Attorney Docket Number	040079-000210US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C30	Star Bridge Systems website "Testimonials" About Us page at: http://www.starbridgesystems.com , 3 pages.	
	C31	Star Bridge Systems website "Welcome" page at: http://www.starbridgesystems.com , 1 page.	
	C32	THOMSON, KIMBALL, "From the Basement to the Stars: SBS Unleashes VIVA", Digital iQ, April 2001, pp. 58-63	
	C33	VIJAYAN, JAIKUMAR, Abstract and full text of "Users Tune Out Buzz Over 64-Bit Unix.", Computerworld, February 17, 1997, Vol. 31, No. 7, Page 10.	
	C34	VILLARREAL, A & SCALES, J.A., Abstract of "Distributed Three-dimensional Finite-Difference Modeling of Wave Propagation in Acoustic Media", <i>Computers in Physics</i> , vol. 11, no. 4, July-Aug., 1997, pp. 388-399.	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.